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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,001	07/23/2001	Tadamitsu Ryu	NAA-CAI-P23	4587

7590 08/30/2004

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EXAMINER

HIRL, JOSEPH P

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/890,001	Applicant(s) RYU, TADAMITSU	
	Examiner Joseph P. Hirl	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-14 are pending in this application.

Information Disclosure Statement

2. The IFW does not contain a form 1449. In response to this office action, the applicant should prepare a PTO 1449 listing all of the appropriate documents.

This objection must be corrected.

Claims Objection

3. Claims 1, 2, 5, 7, 8, 9, 12, and 14 have not been amended. Remove "(amended)" from these claims.

This objection must be corrected.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

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regards as the invention. The terms, "not-full" and "some" are relative and render the claim uncertain.

6. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "etc." is relative and renders the claim uncertain.

7. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The terms "not-full" and "some" are relative and render the claim uncertain.

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Signal recognition is axiomatically a condition to recognition target judgment. How can the recognition target judgment signal be co-instantaneous to the recognition signal?

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 6 and 13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claim raises a question concerning the requirement of concreteness. For a given situation, the response from the operator will vary depending on the operator, creating variability and a lack of concreteness and such claims are therefore non-statutory under 35 U.S.C. 101.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

12. Claims 1-14 are rejected under 35 U.S.C. 102(a) as being anticipated by Yoshinao et al (Japan Patent 10137221, computer xlation, referred to as **Yoshinao**).

Claim 1

Yoshinao anticipates an object definition dictionary for recording firing condition and recognition target candidate which are divided into more than 3 target parts and/or recording object definition (**Yoshinao**, p 7, l 13-24; Examiner's Note (EN); such are S1 ... S14); sensor means recognizing a recognition target (**Yoshinao**, p 7, l 13-24); data disposition means connected to said sensor means for pre-disposing, such as cutting and dividing the data taken in by said sensor means into each of the target parts (**Yoshinao**, p

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7, l 13-24); at least 3 recognition target judgment objects connected to said data disposition means, said recognition target judgment objects having a memory in which data definition corresponding to each of the target parts and the firing condition are recorded, and being designed to fire when it satisfies the data definition recorded and the firing condition recorded (**Yoshinao**, p 7, l 13-24); a plural of recognition signal transmission objects of hierarchy construction including self-designation one(s) having a memory in which respective object definition and its firing condition are recorded, each of said recognition signal transmission objects being connected to one or more of the recognition target judgment object(s) or the lower level recognition signal transmission objects such that they are constructed to decrease gradually the number on the same level, and being designed to fire when it satisfies the respective object definition recorded and the respective firing condition recorded (**Yoshinao**, p 7, l 25-42; EN: Fig. 1 identifies hierarchy construction; object definition defines firing condition; correlation establishes appropriate connections; logic defines the number on a given level; full correlation establishes similarity); and, definition setting means connected to the object definition dictionary, the recognition target judgment objects and/or the recognition signal transmission objects, said definition setting means taking the firing condition, the data definition and/or the object definition out and recording the same in the respective object (**Yoshinao**, p 7, l 25-42).

Claim 2

Yoshinao anticipates there exist a plural of said recognition target candidate, and, said at least 3 recognition target judgment objects and a plural of recognition signal transmission objects are set up as an unit for each of said recognition target candidate, and said definition setting means take(s) the firing condition, the data definition and/or the object

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definition off with respect to the respective recognition target candidate and records) the same on the respective object of each unit (**Yoshinao**, p 7, l 13-42).

Claims 3, 10

Yoshinao anticipates said pre-disposing is at least one of pattern matching, tracking, functioning, on/off signaling, numeralizing, coordinating, parametering and outlining (**Yoshinao**, p 7, l 25-30).

Claims 4, 11

Yoshinao anticipates said sensor means is(are) at least one of a camera, an image scanner, a microphone, a thermometer, timer and switch (**Yoshinao**, p 7, l 13-15).

Claims 5, 12

Yoshinao anticipates sensor means is(are) perceiving means for perceiving at least one of animation, stationary images, lines, dots, words, characters, voices, sounds, times and electrical signals (**Yoshinao**, p 7, l 13-15).

Claims 6, 13

Yoshinao anticipates recognition failure finding disposition means connected to said objects for producing recognition signal when it succeeds in the recognition of input signal or recognition failure signal when it fails to recognize (**Yoshinao**, p 8, l 1-6); inquiry disposition means connected to the recognition failure finding disposition means for inquiring to an operator according to said recognition failure signal (**Yoshinao**, p 8, l 1-6); response acquisition means connected to the inquiry disposition means for acquiring response from said operator (**Yoshinao**, p 8, l 1-6); and response registration disposition means connected to the response acquisition means and said objects for registering the response from said response acquisition means on the object definition dictionary (**Yoshinao**, p 4, l 1-6; EN: collating dictionary contains all registered responses).

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Claim 7

Yoshinao anticipates not-full condition firing disposition means for watching each of said objects and for investigating the related object to let the same fire, if needed, or reset the memory when some of said firing condition is satisfied (Yoshinao, p 8, l 1-12; EN: a high rate of discernment would come following solving the conditional firing disposition).

Claim 8

Yoshinao anticipates recording firing condition and recognition target candidate which are divided into more than 3 target parts and/or recording object definition in an object definition dictionary (Yoshinao, p 7, l 13-24) ; providing recognition target judgment objects for each of said target parts of recognition target that judges identity between said at least three target parts of the recognition target and said corresponding parts of the recognition target candidate which have been recorded in advance (Yoshinao, p 7, l 20-30); providing a plural of recognition signal transmission objects of hierarchy construction that judges genuineness of one or plural of target parts of the recognition target, said recognition signal transmission objects are connected to one or more of the recognition target judgment objects or the lower level recognition signal transmission objects such that they are constructed to decrease gradually the number with coming up of level in hierarchy (Yoshinao, p 7, l 25-42; EN: Fig. 1 identifies hierarchy construction; object definition defines firing condition; correlation establishes appropriate connections; logic defines the number on a given level; full correlation establishes similarity; when a judgment result occurs, it is axiomatic that the number coming up in the hierarchy is decreased); recording the data definition corresponding to each of the target parts and the firing condition on a plural of the recognition target judgment object(s) while recording the recognition target definition and the firing condition on the recognition signal transmission object(s) after

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taking the respective ones (**Yoshinao**, p 7, l 20-24; En: such is the process of correlation): recognizing a recognition target by sensor means (**Yoshinao**, p 7, l 13); predisposing such as cutting and dividing the data taken in by said sensor means into each of the target parts at data disposition means (**Yoshinao**, p 7, l 13-20); sending the data cut into the respective target part at the data disposition means to the recognition target judgment object for said target part (**Yoshinao**, p 7, l 37-42); firing when it satisfies the data definition recorded and the firing condition recorded at the recognition target judgment object (**Yoshinao**, p 7, l 37-42); firing the recognition signal transmission object when the output from said recognition target judgment object or said lower level recognition signal transmission object satisfy the respective object definition recorded and the respective firing condition recorded (**Yoshinao**, p 7, l 37-42) and, outputting a recognition signal that means success in recognition when output from the predetermined lower level recognition signal transmission object satisfies said object definition and said firing condition at the most upper level recognition target transmission object (**Yoshinao**, p 7, l 30-42; EN: such are the results of equation for "T").

Claim 9

Yoshinao anticipates that there exist a plural of said recognition target candidate (**Yoshinao**, p 7, l 13-24); said object definition etc. recording step comprises a step of recording the firing condition, the data definition and/or the object definition with respect to the respective recognition target candidate on said object definition dictionary (**Yoshinao**, p 7, l 13-24); said recognition signal transmission object providing step comprises a step of providing said recognition target judgment objects and said recognition signal transmission objects in a predetermined connecting arrangement for each of the recognition target candidate (**Yoshinao**, p 7, l 25-30); said data sending step to the recognition target

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judgment object comprises a step of sending the data cut into the respective target part at the data disposition means to the respective unit for the recognition target candidate (Yoshinao, p 7, l 25-30); said recognition target judgment object firing step and the recognition signal transmission object firing steps comprise steps of firing the both simultaneously for the respective recognition target candidate (Yoshinao, p 7, l 25-42); and, said recognition signal outputting step comprises a step of outputting the recognition signal only at the succeeded unit (Yoshinao, p 7, l 25-42).

Claim 14

Yoshinao anticipates watching the respective object and, when some of said firing condition is satisfied, investigating the related object to let the same fire, if needed, or reset a memory (Yoshinao, p 8, l 1-6; EN: such is the case when "it is not probable enough").

Examination Considerations

13. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, l 45-48; p 2100-9, c 1, l 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

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14. Examiner's Notes are provided to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but a link to prior art that one of ordinary skill in the art would find inherently appropriate.

15. Examiner's Opinion: Paras 12. and 13. apply. Computers, databases, facial analysis by segments and decision-making is generic to the art.

Conclusion

16. The prior art of record and not relied upon is considered pertinent to applicant's disclosure.

- Akio, Japan Paten No. 02213978
- Tumey et al, U.S. Patent Pub. 2002/0097145
- Ogasawara, U.S. Patent Pub. 2002/0016740
- Pryor, U.S. Patent 5,982,352

17. Claims 1-14 are rejected.

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Correspondence Information

18. Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner, Joseph P. Hirl, whose telephone number is (703) 305-1668. The Examiner can be reached on Monday – Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anthony Knight can be reached at (703) 308-3179.

Any response to this office action should be mailed to:

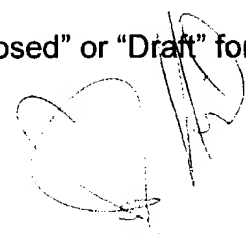
Commissioner of Patents and Trademarks,
Washington, D. C. 20231;

or faxed to:

(703) 746-7239 (for formal communications intended for entry);

or faxed to:

(703) 746-7290 (for informal or draft communications with notation of "Proposed" or "Draft" for the desk of the Examiner).



Joseph P. Hirl

August 23, 2004